

Lecture 4: Rational Expectations: Implications for Policy

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Econometric Policy Critique

- Econometric models are used to forecast and to evaluate policy
- Lucas critique, based on rational expectations, argues that policy evaluation should not be made with these models
 - The way in which expectations are formed (the relationship of expectations to past information) changes when the behavior of forecasted variables changes
 - The public's expectations about a policy will influence the response to that policy

New Classical Macroeconomic Model

- All wages and prices are completely flexible with respect to expected change in the price level
- Workers try to keep their real wages from falling when they expect the price level to rise
- Anticipated policy has no effect on aggregate output and unemployment
- Unanticipated policy does have an effect
- Policy ineffectiveness proposition

FIGURE 1 Short-Run Response to Unanticipated Expansionary Policy in the New Classical Model

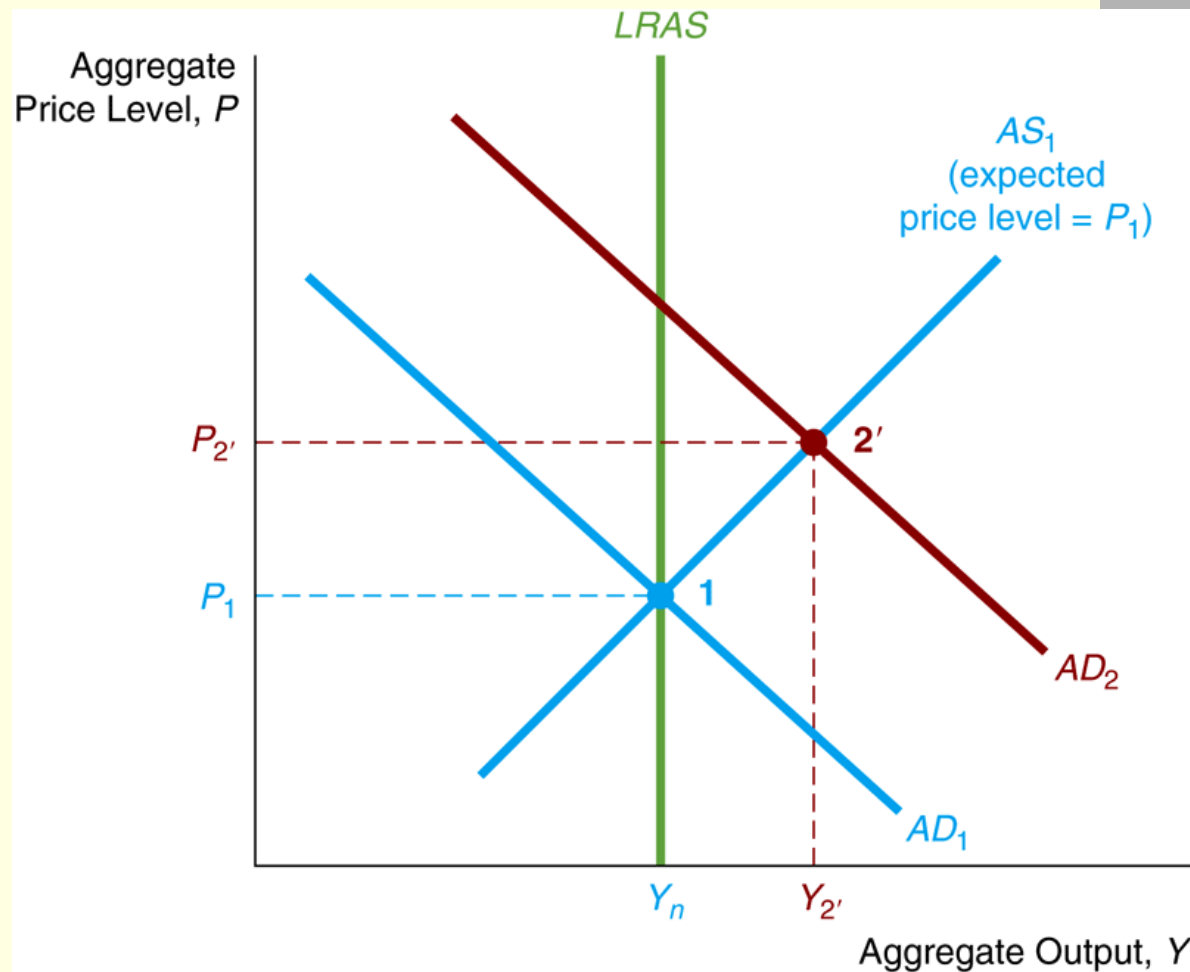


FIGURE 2 Short-Run Response to Anticipated Expansionary Policy in the New Classical Model

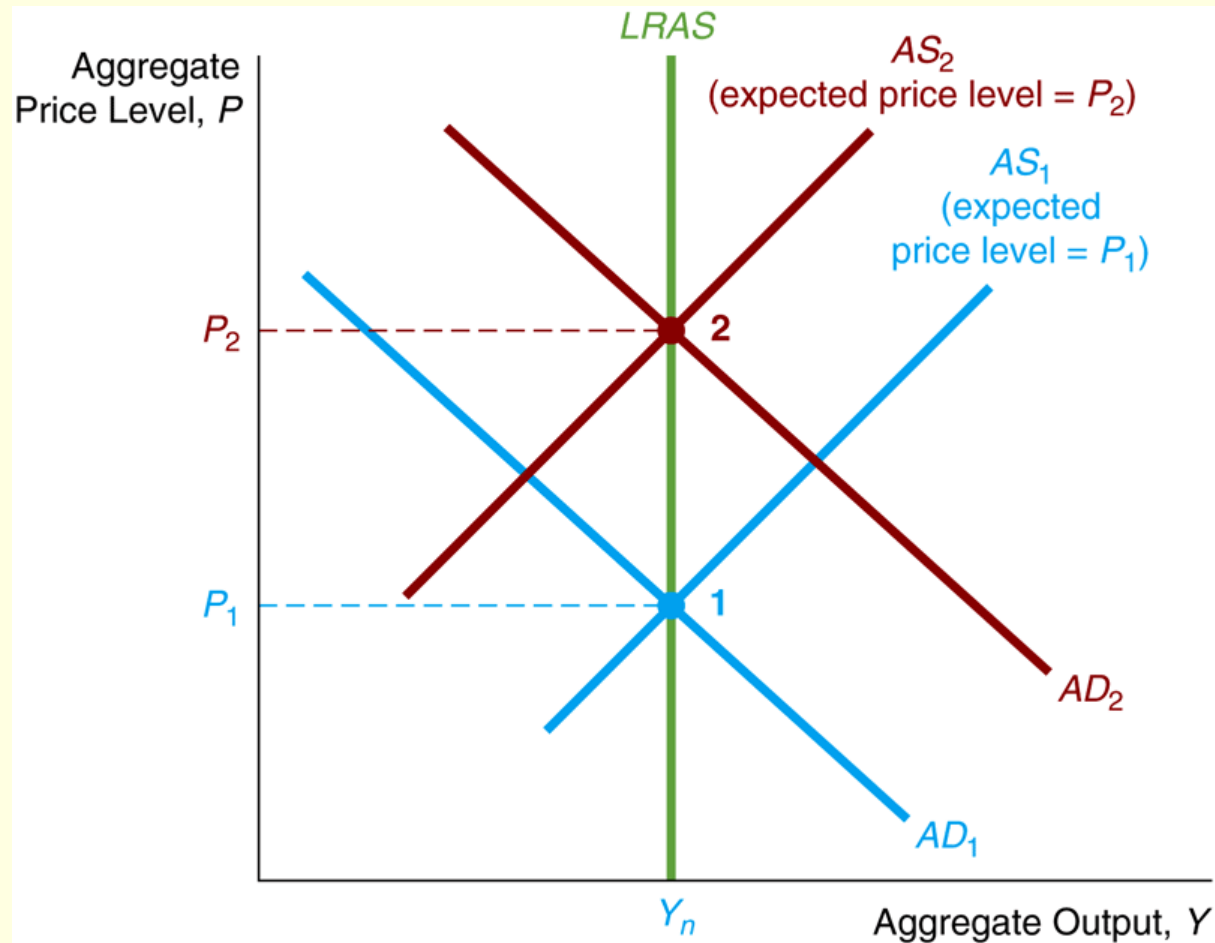
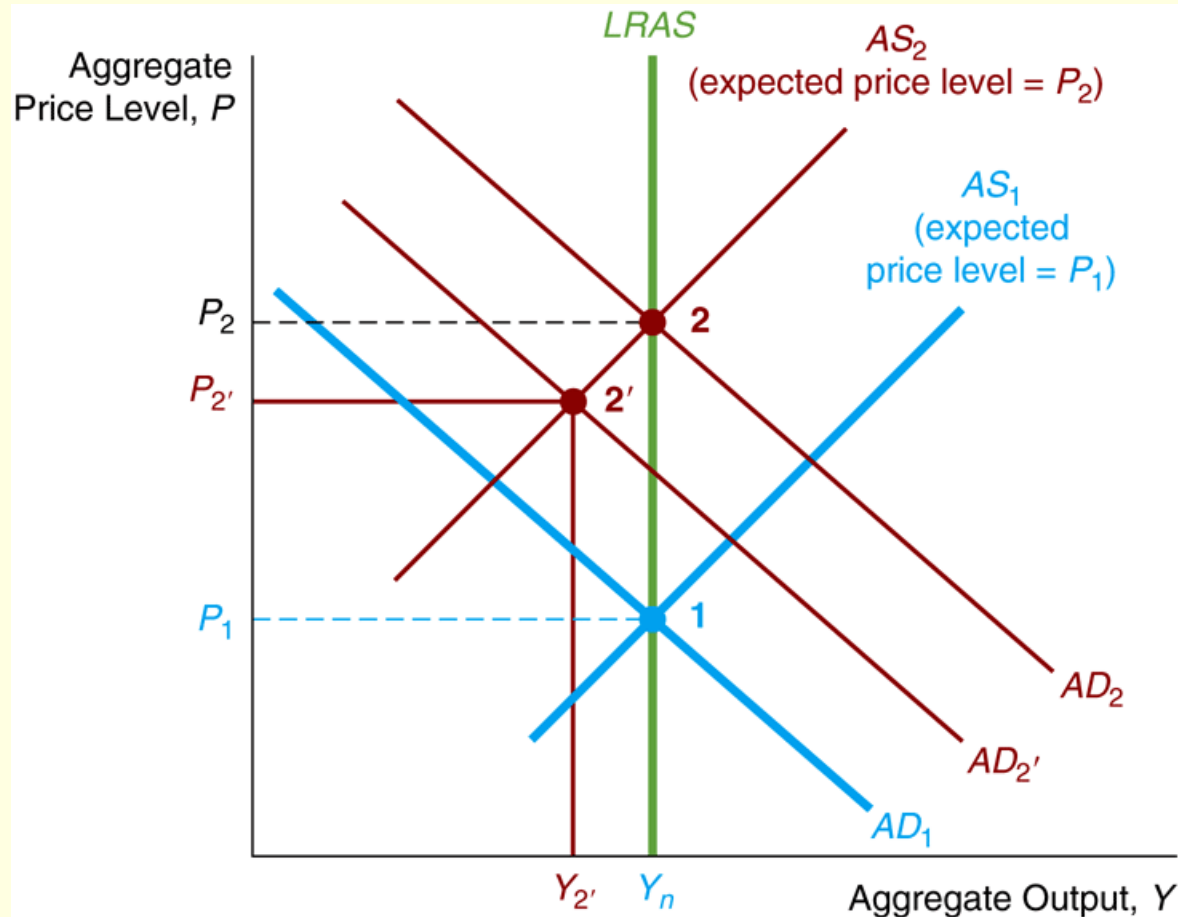


FIGURE 3 Short-Run Response to an Expansionary Policy That Is Less Expansionary Than Expected in the New Classical Model



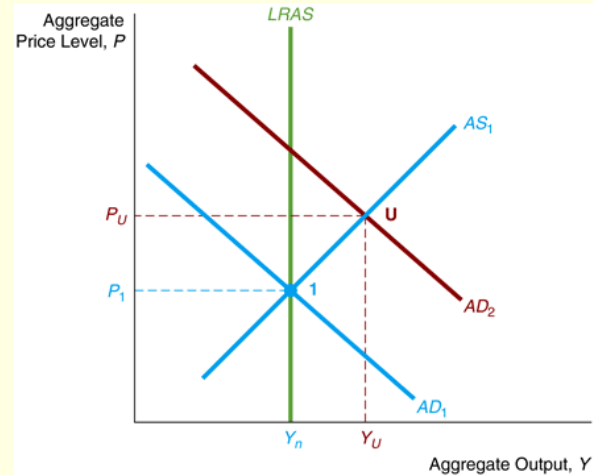
Implications for Policymakers

- Distinction between effects of anticipated and unanticipated policy actions
- Policymakers must know expectations to know outcome of the policy
 - Nearly impossible to find out expectations
 - People will adjust expectations guessing what the policymaker will do
- Design policy rules so prices will remain stable

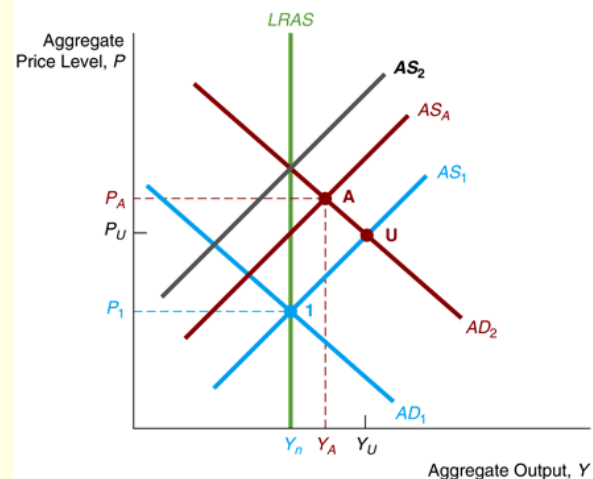
New Keynesian Model

- Objection to complete wage and price flexibility
 - Labor contracts
 - Reluctance by firms to lower wages
 - Fixed-price contracts
 - Menu costs
- Model assumes rational expectations but wages and prices are sticky

FIGURE 4 Short-Run Response to Expansionary Policy in the New Keynesian Model



(a) Response to an unanticipated expansionary policy



(b) Response to an anticipated expansionary policy

Implications for Policymakers

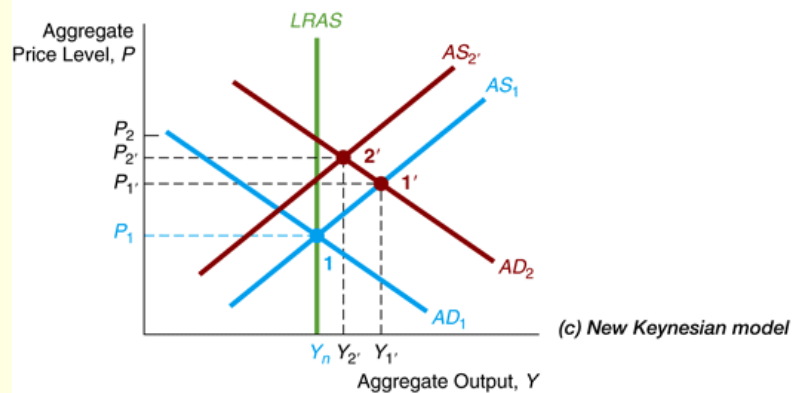
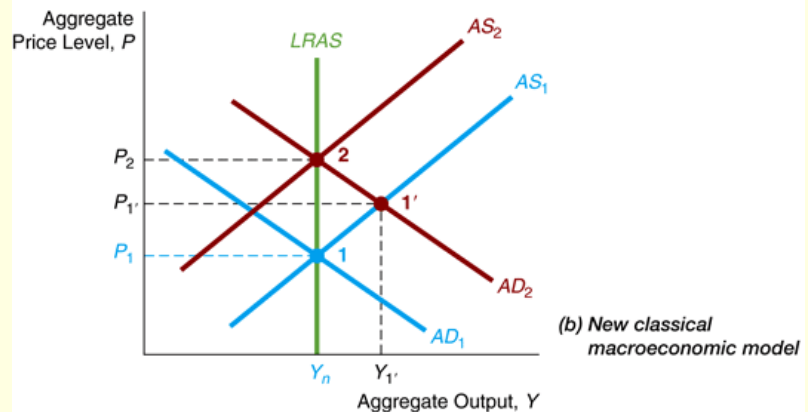
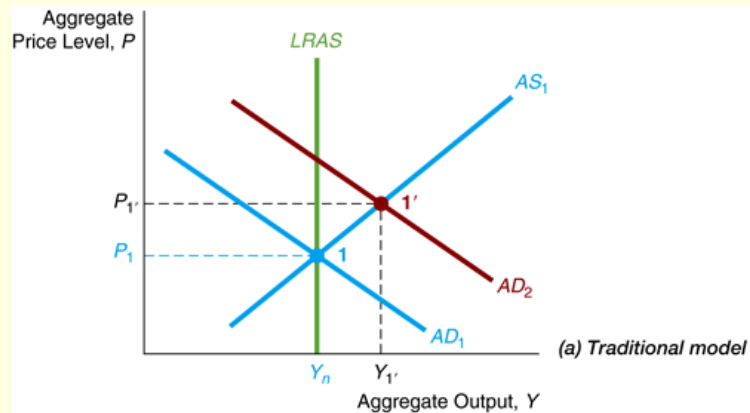
- There may be beneficial effects from discretionary stabilization policy
- Designing the policy is not easy because the effect of anticipated and unanticipated policy is very different
- Must understand public's expectations

Summary Table 1 The Three Models

Model	Response to Unanticipated Expansionary Policy	Response to Anticipated Expansionary Policy	Can Discretionary Policy Be Beneficial?	Response to Unanticipated Anti-inflation Policy	Response to Anticipated Anti-inflation Policy	Is Credibility Important to Successful Anti-inflation Policy?
Traditional model	$Y \uparrow, P \uparrow$	$Y \uparrow, P \uparrow$ by same amount as when policy is unanticipated	Yes	$Y \downarrow, \pi \downarrow$	$Y \downarrow, \pi \downarrow$ by same amount as when policy is unanticipated	No
New classical macro-economic model	$Y \uparrow, P \uparrow$	Y unchanged, $P \uparrow$ by more than when policy is unanticipated	No	$Y \downarrow, \pi \downarrow$	Y unchanged, $\pi \downarrow$ by more than when policy is unanticipated	Yes
New Keynesian model	$Y \uparrow, P \uparrow$	$Y \uparrow$ by less than when policy is unanticipated, $P \uparrow$ by more than when policy is unanticipated	Yes, but designing a beneficial policy is difficult	$Y \downarrow, \pi \downarrow$	$Y \downarrow$ by less than when policy is unanticipated, $\pi \downarrow$ by more than when policy is unanticipated	Yes

Note: π represents the inflation rate.

FIGURE 5 Comparison of the Short-Run Response to Expansionary Policy in the Three Models

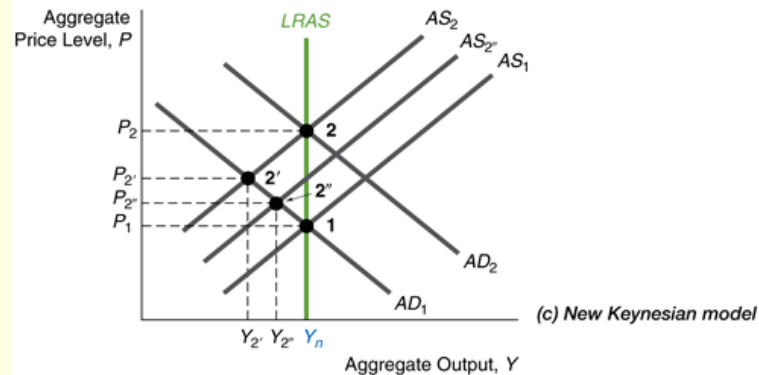
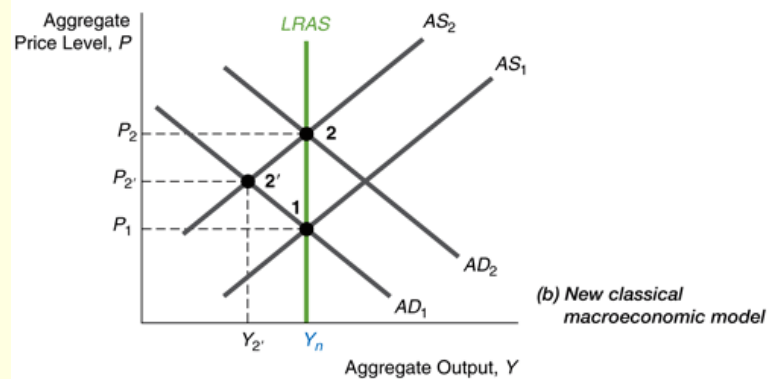
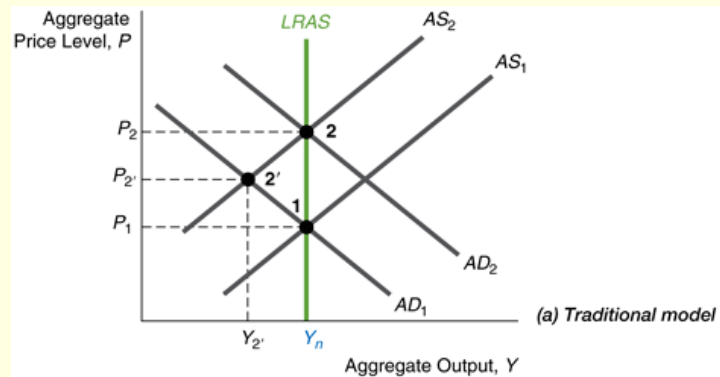


Stabilization Policy

- Traditional
 - It is possible for an discretionary policy to stabilize output fluctuations
- New Classical
 - Discretionary stabilization policy aggravates output fluctuations
- New Keynesian
 - Anticipated policy does matter to output fluctuations
 - More uncertainty about the outcome than the traditional model

FIGURE 6

Anti-inflation Policy in the Three Models



Credibility in Fighting Inflation

- Public must believe (expect) that the policy will be implemented
- New Classical
 - Cold turkey approach
- New Keynesian
 - More gradual approach
- When considering credibility, actions speak louder than words

Impact of the Rational Expectations Revolution

- Expectations formation will change when the behavior of forecasted variables changes
- Effect of a policy depends critically on the public's expectations about that policy
- Empirical evidence on policy ineffectiveness proposition is mixed
- Credibility is essential to the success of anti-inflation policies
- Less fine-tuning and more stability